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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/629,208	07/29/2003	Eiji Ozawa	8373.311US01	5663
7590 Hämre, Schumann, Mueller & Larson, P.C. P. O. Box 2902-0902 Minneapolis, MN 55402			EXAMINER COOLMAN, VAUGHN	
			ART UNIT 3618	PAPER NUMBER

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/12/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)
	10/629,208	OZAWA ET AL.
	Examiner	Art Unit
	Vaughn T. Coolman	3618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 08 August 2006.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) 11 and 16 is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-10, 12-15 and 17-24 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application
- 6) Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 6, 7, 8, 10, 12, 13, 19, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davis et al (U.S. Patent No. 6,755,269 B1) in view of Hirano et al (U.S. Patent No. 4,506,754).

[claim 1] Davis (see FIGS 1-11) discloses a four-wheeled vehicle (30) comprising:

- a steering mechanism having a bar handle (41);
- a front part having right and left front wheels (34 and 36);
- a rear part having right and left rear wheels (38 and 40);
- a driver's seat (86) disposed at said front part;
- a rear passenger seat (88) disposed behind said driver's seat with a backrest (90) for the driver therebetween and the rear passenger seat facing forwardly.

Davis further shows in FIG 3 the front and rear wheels defining a straight line at a level extending in a longitudinal direction through the uppermost points of the front and rear wheels. Davis also teaches a backrest (90) that could obviously be used in the location of the raised shoulder (96). The motivation to do so would be to increase the support and safety of the passenger. According to the positions of the driver and passenger in FIG 3, it appears that any passenger seat backrest similar to the driver seat backrest (90) would be entirely positioned

forwardly of a rotation axis of the rear wheels. Davis also does not show the driver's seat disposed at substantially the same level as the straight line described above or the rear passenger seat being disposed at a higher level than the driver's seat.

However, Hirano teaches a seating configuration for a vehicle wherein the driver's seat (50) is disposed at substantially the same level as a straight line defined by the uppermost points of the front and rear wheels. Furthermore, Hirano shows in a side view, more of the driver's seat is located below the straight line than above it and some of the driver's seat is also located above the straight line. Hirano also shows a passenger seat (64, column 3, lines 5-9) being disposed at a higher level than the driver's seat. It is obvious that in lowering the seat from a conventional height as taught by Hirano, it would result in the vehicle with driver and passenger maintaining a low center of gravity and the passenger would also have a better view of the path that the vehicle was traversing due to an elevated position relative to the driver.

Hirano is considered analogous art because both Davis and Hirano teach straddle-type vehicles. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the vehicle shown by Davis with the seat location as taught by Hirano, since such a modification would provide the advantage of a more relaxed and comfortable seating position.

[claim 2] Davis further shows the driver's seat including a front part having driver's footrests (66, 68) provided at opposite sides thereof, said driver's seat being formed to allow a driver to sit astride thereon with his feet rested on said footrests (shown in FIG 3).

[claim 6] Davis further shows said driver's seat and said rear passenger seats being opened at opposite sides thereof. As best understood by the examiner, the term "opened" is defined by the applicant as being able to enter/straddle the seat from the "opened" area.

[claim 7] Davis further shows the driver's seat and said rear passenger seat being formed to allow passengers to sit astride thereon (shown in FIG 3).

[claim 8] Davis further shows (FIG 6) the driver's seat being positioned at substantially the same level as said rear passenger seat.

[claim 10] Hirano further shows a front cover (80) and a windshield (82) disposed in front of the bar handle (70) of his vehicle, and a body cover disposed behind and below said driver's seat (shown in FIG 1).

[claim 12] Davis further shows (FIG 9) a power unit (122) part disposed below one of said driver's seat and said rear passenger seat, said power unit part including a torque converter mechanism (126).

[claim 13] Davis further shows the power unit part further including a transmission mechanism (128) for transmitting an output from said torque converter mechanism to said right and left rear wheels to drive said right and left rear wheels.

[claim 19] Davis further shows (FIG 11) a power unit part (148) disposed below said rear passenger seat, said front wheel and said rear wheel providing a straight line extending through the vicinities of uppermost points thereof, said power unit part being disposed below said straight line. Examiner notes that Davis is silent as to the explicit orientation of the engine with respect to the frame; however, FIG 2 appears show the front and rear portions of the frame as being mirror images. It would have been obvious to orient the engine in either a more forward

or more rearward location depending on specific longitudinal center of gravity locations such as the weight of the steering assembly or exhaust system. Examiner also notes that the term “vicinity” is being interpreted reasonably broad as defined by Merriam Webster’s Tenth online dictionary as “the quality or state of being near”. Additionally, the term “below” is being interpreted reasonably broad as defined by Merriam Webster’s Tenth online dictionary as “lower in place than”.

[claim 24] Davis in view of Hirano discloses all of the elements of the claimed invention as described above in re claim 1. Furthermore, the four-wheeled vehicle is disclosed by Davis as having substantially the same overall length as a motorcycle, and a width substantially half the overall length (Column 1, lines 56-60). Examiner notes that a 45 inch or greater wheelbase is substantially the same as a motorcycle, and the track of 36 inches or greater could obviously be substantially half of the overall length. Examiner also notes that a wheelbase of 72 or greater inches for a motorcycle would not be out of the ordinary either.

Claims 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davis in view of Hirano and further in view of Maki et al (U.S. Patent No. 6,270,106 B1).

[claim 3] Davis in view of Hirano discloses all of the elements of the claimed invention as described above except for each of the footrests having a side edge projecting upwardly.

Maki teaches (FIGS 1-7) footrests (30) for a four-wheeled vehicle, each having a side edge (50) projecting upwardly. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the vehicle shown by Davis and Hirano, with the side edge configuration as taught by Maki, since such a modification would provide the

advantage of, according to Maki, preventing the rider's foot from inadvertently slipping off of the footrest (Column 4, lines 33-35).

[claim 4] Davis further shows (FIG 2) the right front wheel and said right rear wheel providing a first straight line extending therethrough, said left front wheel and said left rear wheel providing a second straight line extending therethrough, and the combination with Maki would disclose said side edges being positioned within a region defined between said first and second straight lines when viewed in top plan (shown in FIG 2).

[claim 5] Davis further shows (FIGS 7 and 8) rear passenger's footrests being disposed behind said driver's footrests.

Claims 9 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davis in view of Hirano and further in view of CORBIN seat for 2001 HONDA Goldwing 1800.

[claim 9] Davis in view of Hirano discloses all of the elements of the claimed invention as described above except for the rear passenger seat having bulged portions provided at opposite sides thereof for providing a larger width than the driver's seat.

The CORBIN seat specifications state that the rider [driver] seating is 17.5" wide and the passenger seating is 19" wide. The pictures provided show bulged portions on opposite sides of the rear passenger seat for providing the larger width, as described above, than the driver's seat. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the vehicle shown by Davis and Hirano, with the bulged portions of the rear seat

as taught by CORBIN, since such a modification would provide a “generous” and comfortable seating platform for the passenger.

[claim 21] Davis in view of Hirano discloses all of the elements of the claimed invention as described above in re claim 1, except for the rear passenger seat being in the form of a bucket seat. However, referring to the individual photographs provided by the examiner, it is obvious that the rear passenger seat is in the form of a bucket seat. Furthermore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the vehicle shown by Davis and Hirano, with the rear passenger seat form as taught by CORBIN, since such a modification would provide a more comfortable seating platform for the passenger than that disclosed by Davis or Hirano.

Claims 14, 15, 17, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davis in view of Hirano and further in view of Hanagan et al (U.S. Patent No. 4,225,183).

[claim 14] Davis in view of Hirano discloses all of the elements of the claimed invention as described above except for first side support members disposed at opposite sides of said driver's seat.

Hanagan teaches (see FIG 1) first side support members disposed at opposite sides of a driver's seat (11). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the vehicle shown by Davis and Hirano, with the side supports as taught by Hanagan, since such a modification would provide the advantage of lateral support for the driver during cornering maneuvers.

[claim 15] Davis in view of Hirano discloses all of the elements of the claimed invention as described above except for second side support members disposed at opposite sides of said rear passenger seat.

Hanagan teaches (see FIG 1) first side support members (16) disposed at opposite sides of a rear passenger seat (12). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the vehicle shown by Davis and Hirano, with the side supports as taught by Hanagan, since such a modification would provide the advantage of lateral support for the passenger during cornering maneuvers.

[claim 17] Hanagan further shows (see FIG 1) a backrest disposed behind said driver's seat (11) and united with said first side support members (shown in FIG 1).

[claim 18] Hanagan further shows the driver's seat (11) and said rear passenger seat (12) have a member (the backrest) disposed therebetween, said driver's seat and said rear passenger seat cooperating with each other to provide a single seat, said member being positioned at an intermediate part of said single seat (shown in FIG 1).

Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Davis in view of Hirano and further in view of Toriyama et al (U.S. Patent No. 6,218,804 B1).

[claim 20] Davis in view of Hirano discloses all of the elements of the claimed invention as described above including a power unit part being disposed below said rear passenger seat. Neither teaches the power unit part including a forwardly directed engine.

Toriyama, however, teaches a vehicle including a power unit part (200) being disposed below a rear passenger seat (3), wherein the power unit part includes a forwardly directed

engine. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the vehicle shown by Davis and Hirano, with the forwardly directed engine as taught by Toriyama, since such a modification would provide the advantage of lowering the center of gravity even more than the vehicle described by Davis, which appears to show a vertical cylinder arrangement for the engine.

Examiner notes that the term “below” is being interpreted reasonably broad as defined by Merriam Webster’s Tenth online dictionary as “lower in place than”.

Claims 22 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davis in view of Hirano as applied to claim 1, and further in view of Kurata (U.S. Patent No. 4,606,429).

[claim 22] Davis in view of Hirano discloses all of the elements of the claimed invention as described above in re claim 1, except for the roll bars and their configuration.

Kurata teaches (see FIGS 1-3) a vehicle utilizing a similar seating configuration as that of Davis and Hirano wherein a front roll bar (7) is disposed in front of a driver's seat (14) and in an upright position; a rear roll bar (9) is disposed behind a rear passenger seat (15) and in an upright position; and said front roll bar and said rear roll bar providing a straight line extending through the vicinities of top ends thereof, said straight line having a space defined therebelow to allow a driver and a rear passenger to sit on said driver's seat and said rear passenger seat, respectively, within said space. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the vehicle shown by Davis and Hirano, with the roll bars as

taught by Kurata, since such a modification would provide the advantage of protecting the passengers from head injury in the event of a rollover of the vehicle.

Examiner reminds applicant of the previous examiner's observation on pages 7 and 8, final/first paragraph respectively, wherein it was noted that the ability of a driver and passenger to sit within the space defined above is entirely dependent upon the height of each person, furthermore, sitting posture could also play a role in this limitation.

[claim 23] Davis further shows (FIGS 3 and 6) the backrest being positioned at the same level as the waist of the driver sitting on the driver's seat.

Response to Arguments

Applicant's arguments filed 08/08/2006 have been fully considered but they are not persuasive.

Examiner contends, contrary to applicant's statements on page 9, that Davis indeed teaches a passenger seat backrest entirely positioned forward of a rotation axis of the rear wheels as described in re claim 1.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vaughn T. Coolman whose telephone number is (571) 272-6014. The examiner can normally be reached on Monday thru Friday, 8am-6pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Ellis can be reached on (571) 272-6914. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

vtc

02/07/2007

Travis Coolman
Examiner
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